



# Internationalized Domain Names Expedited Policy Development Process

**F2F Workshop | 6-8 December 2023**  
**Mandarin Oriental, Kuala Lumpur, Malaysia**



# Agenda

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1. Roll Call and SOI Updates
2. Welcome and Introductions
3. Deliberate on Trademark Protection Mechanisms:
  - a. F1: TMCH
  - b. D6a: UDRP Remedy
  - c. D7a: URS Remedy
  - d. F2: RPM Catch All
4. Deliberate on Variant Domain Name Registration Data: D8
5. Deliberate on IDN Implementation Guidelines:
  - a. G1: Update Mechanism
  - b. G1a: Separate Legal Mechanism
6. Discuss deferred items from IDN Implementation Guidelines 4.0
7. Complete Discussions of:
  - a. IDN Table Harmonization (Preliminary Recommendation 1)
  - b. Deletion of Source Domain Name (Preliminary Recommendation 5)
8. Discuss Draft Glossary & Terminology Usage in Phase 2 Draft Text
9. AOB

# Deliberate on Trademark Protection Mechanisms

F1, D6a, D7a, F2

# Charter Question F1

**F1: Are there any adjustments to the TMCH and its Sunrise and Trademark Claims services needed?**

# Trademark Clearinghouse Basics

**What:** A central repository for info to be authenticated / stored / disseminated, pertaining to the rights of mark holders

Accepts and verifies the following types of marks:

1. nationally or regionally registered trademarks
2. court-validated marks
3. marks protected by statute or treaty (such as geographical indications or designations of origin)

Consists of two components:

1. **Trademark Validator (TMV):** an organization that has been authorized by ICANN org to authenticate and validate registrations in the Trademark Database (TMDB) ensuring the marks qualify
  - Current TMV provider is Deloitte
2. **TMDB:** a database that concentrates the information about the “verified” Trademark records from the TMVs and provides information to the registries and registrars to support TMCH’s services

**Why:** Provide protection for verified legal rights of mark holders

**How:** Major benefit of recording marks with the TMCH includes the following mandatory services

- **Sunrise:** Access to a priority registration period
- **Trademark Claims:** Notification from TMCH when a domain matching a trademark has been registered

# Sunrise & Trademark Claims

*ICANN mandated mechanisms in the development of Applicant Guidebook for 2012 Round*

## Sunrise

Allows trademark holders an advance opportunity to register domain names corresponding to their marks during the Sunrise period for a TLD before names are generally available to the public

### Required submissions to TMCH:

- **Trademark record**
  - Trademark info, class of goods or services, justification where the trademark is registered, etc.
- **Proof of use**
  - Declaration stating that the trademark is being used;
  - A sample showing the trademark in use, e.g., advertisement, branded product, etc.

## Trademark Claims (Basic Eligibility)

In a minimum 90 day period following the Sunrise period, the prospective registrar provides a notice, displaying relevant trademark info, to prospective registrants of the trademark record, and a notice to trademark holders if the registration proceeds

If determine to proceed with registration, the registrant must acknowledge the claims notice

### Required submission to TMCH:

- **Trademark record**

# Domain Name Labels Inclusion

A trademark record in the TMCH can include **domain name labels** that correspond to the trademark

- **Up to 10 domain name labels** corresponding to one trademark record are included in the initial cost of verification by TMCH
- These labels are compared against potential registrations and have the capability of triggering claims notifications

Domain name labels generated based on matching rules appear in:

- **Domain Name Label (DNL) list:**
  - All labels covered by a trademark in the TMCH with support for Trademark Claims
  - Used by registries during the Trademark Claims Period to determine whether a requested domain name matches a record in the TMCH
- **Sunrise Label (SURL) list:**
  - Contains only those labels corresponding to trademark holders that are eligible and have chosen to participate in the Sunrise Period
  - Trademark owners be provided with a signed mark data (SMD) file to participate in the Sunrise Period

# Matching Rules for Sunrise & Claims Services

- **Exact Match:** When all and only the complete and identical textual elements exist in both the trademark and the label
  - “ICANN”  $\longleftrightarrow$  “icann.example”
- **Transformations:** When certain elements contained in a trademark that cannot be represented in the DNS are transformed
  - Spaces contained within a trademark that are either replaced by hyphens (or vice versa) or omitted
    - “ICANN TMCH”  $\longleftrightarrow$  “icann-tmch.example”
  - Only two special characters (@ and &) can be replaced by the canonical translation of the word (‘at’ and ‘and’)
    - “Head & Shoulders”  $\longleftrightarrow$  “headandshoulders.example”
    - In any official language of the jurisdiction from which the trademark right is protected and verified
  - Punctuation or special characters may either be (i) omitted or (ii) replaced by hyphens or underscores
    - “Domino’s”  $\longleftrightarrow$  “dominos.example”
- **No plural and no “marks contained”** (a mark that appears amidst other words) are able to qualify for inclusion
- More info: <https://newgtlds.icann.org/sites/default/files/matching-rules-14jul16-en.pdf>



# Languages & Scripts in TMCH

**Use globally accessible and scalable systems so that multiple marks from multiple sources in multiple languages can be accommodated and sufficiently cataloged**

- Accept trademark data from all over the world
  - In both Latin and non-Latin scripts
  - In some cases, accept trademark labels in mixed scripts
- Verify trademark data from multiple global regions

**Intended languages/scripts of trademarks require careful analysis/inquiry with verified trademark owners**

- “Language” and “script” might be used interchangeably in some TMCH documentation
- “Language” of the trademark is not submitted, and cannot be reliably assumed from the script or scripts used

**# of labels on SURL list ≠ # of labels on DNL list ≠ # of verified trademark records**

- Differ due to label matching rules, eligibility, and trademark holders’ preference
- SURL: Not all trademarks qualify for participation in the Sunrise period, and some choose to opt-out
- DNL: A trademark holder may opt-out the Claims service, resulting in no label additions to the DNL list; several labels could be generated in the DNL list for another trademark record

# High-Level Stats

TMCH validator provided ICANN org relevant data as of November 2021

Verified Trademarks	DNL List Labels (non-ASCII)	SURL List Labels (non-ASCII)
47,058 trademarks	1,502 labels	1,114 labels
14 scripts	13 scripts	10 scripts
Arabic, Bengali, Cyrillic, Devanagari, Georgian, Greek, Han, Hangul, Hebrew, Hiragana, Katakana, Latin, Thai	Arabic, Cyrillic, Devanagari, Georgian, Greek, Han, Hangul, Hebrew, Hiragana, Katakana, Latin, Thai	Arabic, Cyrillic, Devanagari, Greek, Han, Hangul, Hebrew, Katakana, Latin
Mixed scripts	Cyrillic-Latin, Greek-Latin, Han-Hiragana-Katakana, Han-Katakana, Han-Latin	Cyrillic-Latin, Greek-Latin, Han-Hiragana-Katakana, Han-Katakana, Han-Latin
Common (i.e., trademarks consisted of numbers)	IDNA2008_NOTVALID (i.e., labels didn't pass IDN 2008, invalid for registration)	IDNA2008_NOTVALID
<ul style="list-style-type: none"> <li>Latin script trademarks = 96.82% of total</li> <li>Han script trademarks = 56.7% of <u>non-Latin</u></li> </ul>	<ul style="list-style-type: none"> <li>Latin script labels = 53.8% of total</li> <li>Han script labels = 25.1% of total</li> </ul>	<ul style="list-style-type: none"> <li>Latin script labels = 53.1% of total</li> <li>Han script labels = 27.7% of total</li> </ul>

# Variant Handling in TMCH

## TMCH does not calculate variants for its matching rules

- Support any official language used in a jurisdiction that grants trademark rights
- Alternative characters used in the creation variant labels will not experience matching rule transformations
  - E.g., if a trademark in traditional Chinese characters is recorded in the TMCH, the matching rules do not define a process for calculating variant labels in simplified Chinese characters
- Requirements and responsibilities for calculating variant labels belong to the registry operator and do not apply to the TMCH itself

# TMCH Ancillary Service: Ongoing Notification

TMCH Validator (Deloitte) provides voluntary ancillary services not mandated by ICANN

**Ongoing Notification:** Following the Trademark Claims Period, the TMCH will notify a trademark holder of potential intellectual property infringement indefinitely, beyond the original 90 day Claims period

- Provide notifications for domain names that are:
  - Exact match to the trademark
    - “trademark clearinghouse” ↔ “trademark-clearinghouse.example”
  - Contain the trademark
    - “trademark clearinghouse” ↔ “thetrademarkclearinghouse-db.example”
  - Partially contain the trademark
    - “trademark clearinghouse” ↔ “clearinghouse.example”; “mark-clearing.example”
  - Similar to the trademark
    - “trademark clearinghouse” ↔ “trademarkclearinghouse.example”; “tràdémàrk-çlearinghòuse.example”
    - **Only apply to Latin script labels based on the “accepted variants”**

Registry operators and other third parties may also provide ancillary services

*\*Ancillary services require ICANN approval and are outside the remit of policy review, as they are voluntarily adopted, separate from ICANN mandated RPMs*

# Variant Handling at Registries (Registry Agreement Spec 7)

Trademark Clearinghouse Rights Protection Mechanisms Requirement **make reference to how a registry may handle variants** in the situation where it has implemented IDN variant registration policies for the TLD

- **Section 2.4.2:** Registry Operator MAY Allocate or register IDN variant labels generated from a label included in a valid SMD file during the Sunrise Period, provided that
  - (i) such IDN variant registration policies are based on the Registry Operator's published IDN tables for the TLD and
  - (ii) such policies are imposed consistently in the Sunrise Period, any Limited Registration Period, any Launch Program and during General Registration
- **Section 4.1.2:** Registries MAY implement additional matching rules at the TLD level, provided that the Claims Services are still implemented for any Claims Registration satisfying such additional matching rules
- **Section 4.1.3:** During the Claims Period, if Registry Operator has established IDN variant policies for Allocation of domain names in the TLD, Registry Operator MUST check all labels in a variant set against the DNL List before any domain names in the set are registered

**Registry operator's policy would NOT have an effect on what domain name labels are generated as part of the TMCH's matching rules**

# How Does 2.4.2 Work?

## Sunrise Period

1. A trademark holder submits mark “example” to the TMCH. The trademark record is verified and the proof of use is accepted; a SMD file is generated
2. The trademark holder is eligible to register the domain name `<example.tld1>` during Sunrise Period
3. A registry of tld1 uses an IDN table where “è” is an allocatable variant to “e”; hence “èexample” is a second-level variant label of “example” under tld1
4. When presented with the SMD file for registration of `<example.tld1>`, the registry has the ability to activate `<èexample.tld1>` for the registrant of `<example.tld1>` during Sunrise Period, at the request by the registrant and in accordance with the registry’s policy

# How Does 4.1.3 Work?

## Trademark Claims Period

1. A potential registrant attempts to register `<example.tld1>`
2. The registry of tld1 applies its IDN Table, generating its corresponding allocatable variant domain, e.g., `<example.tld>`
3. The registry of tld1 is required to query TMCH's DNL list for both `<example>` and `<example>` to determine whether there is a match to a label in the DNL list
4. Since the the mark "`example`" is recorded in the TMCH and its corresponding label is in the DNL list, the registry of tld1 will notify the sponsoring registrar that a Claims notice should be shown to the potential registrant of `<example.tld1>`
5. A Claims notice is shown to the potential registrant of `<example.tld1>` due to the recorded mark and label "`example`" in the TMCH
6. Potential registrant can elect whether to proceed with registration of `<example.tld1>`

**Recommendation 10**: The current rights protection regime associated with the Trademark Clearinghouse (TMCH) process is susceptible to homographic attacks. The roles of the involved parties, specifically registrars, registries, and TMCH, related to matching must be made clear.

**Source:** <https://itp.cdn.icann.org/en/files/security-and-stability-advisory-committee-ssac-reports/sac-060-en.pdf#page=16>



**Recommendation 10**: The current rights protection regime associated with the Trademark Clearinghouse (TMCH) process is susceptible to homographic attacks. The roles of the involved parties, specifically registrars, registries, and TMCH, related to matching must be made clear.

**The current method**: Variant calculation at the registry level, and checking TMCH for the existences of marks for variants in the calculated variant domain set

- **Advantage**: the role of the TMCH is to record existing rights, and not make determinations concerning the scope of rights and whether certain variant label qualify for the same right
- **Downside**:
  - Registries have different IDN Tables, which can be used to generate and register variant domains under different TLDs and cause security, stability, or resiliency concerns
  - Large number of transactions between registry and TMCH due to permutations of certain label

**An alternative method**: Variant calculation conducted via the TMCH, meaning the matching rules would also define if a variant of the registered label matches a label in the DNL, triggering Claims notice

- **Advantage**: Address the downside of current method
- **Downside**:
  - Expand the role of the TMCH by making determinations concerning the scope of rights
  - Could conflict with local law or approved IDN Tables

# Review of All Rights Protection Mechanisms in All gTLDs PDP

- **Feb 2016:** GNSO Council initiated the PDP on the Review of All Rights Protection Mechanisms in All gTLDs PDP
  - **Phase 1 focuses on reviewing all RPMs applicable to New gTLD Program 2012 Round:**
    - Uniform Rapid Suspension System (URS)
    - Trademark Clearinghouse (TMCH)
    - Sunrise and Trademark Claims services offered through TMCH
    - Trademark Post-Delegation Dispute Resolution Procedure (TM-PDDRP)
  - **Phase 2 will focus on reviewing the Uniform Dispute Resolution Policy (UDRP)**
- **Nov 2020:** [Phase 1 Final Report](#) delivered to the GNSO Council
- **Jan 2021:** GNSO Council adopted the Phase 1 Final Report
- **Jan 2022:** ICANN Board adopted the Phase 1 Final Report - implementation effort ongoing

# RPM PDP Phase 1 Final Report

**TMCH Final Recommendation #2:** The Working Group considered the following aspects of the TMCH:...2. Whether the current “exact match” rules should be changed or maintained...The Working Group’s recommendation...is that the status quo (i.e. the current rules as applied to the gTLDs delegated under the 2012 New gTLD Program round) should be maintained.

**Sunrise Final Recommendation #4:** In the absence of wide support for a change to the status quo, the Working Group recommends that the current availability of Sunrise registrations only for identical matches should be maintained, and the matching process should not be expanded.

**Trademark Claims Final Recommendation #4:** In the absence of wide support for a change to the status quo, the Working Group recommends that the current exact matching criteria for the Claims Notice be maintained.

***Rationale:*** *The Working Group believes that the exact match criteria strike the appropriate balance of deterring bad-faith registrations without clear evidence that good-faith domain name applications are substantially deterred.*

## **TMCH Final Recommendation #1**

...4. The TMCH Validation Provider(s), registry operators and other third parties may provide ancillary services to intellectual property rights-holders. To the extent that the TMCH Validation Provider validates and accepts other forms of intellectual property (such as geographical indications) in order to provide such additional voluntary services, these other forms of intellectual property must be held in a separate ancillary database.

## **Additional Agreements**

The Working Group agreed not to develop any recommendation concerning:

- additional marketplace RPMs (as they are outside scope); or
- additional mandatory RPMs

# F1: Discussion Questions

## **F1: Are there any adjustments to the TMCH and its Sunrise and Trademark Claims services needed?**

1. Should the matching rules of the TMCH be expanded to include variant labels corresponding to a verified mark?
2. Do the provisions in the Trademark Clearinghouse Rights Protection Mechanisms Requirement provide sufficient flexibility to registry operators for managing variant domain name registrations during Sunrise and Trademark Claims period?

**D6a: Should transfers ordered by the Uniform Domain Name Dispute Resolution Policy (UDRP) or any other dispute resolution mechanisms be treated the same way to follow the “same entity” requirement?**

# Phase 2 Preliminary Recommendation 7

**Preliminary Recommendation 7:** In the event an inter-registrar transfer process is initiated for a domain name, which is a member of a variant domain set, the process must encompass all of its activated variant domain names, if any, together. The grandfathered variant domain names pursuant to Preliminary Recommendation 3 are exempt from this requirement.

*\* Terminology (e.g., “activated” vs. “allocated”) to be confirmed after discussion of glossary*

**Rationale:** *“...With respect to involuntary transfer, the EPDP Team noted that there may be circumstances where the sponsoring registrar must deny an inter-registrar transfer per the requirements of the Transfer Policy, e.g., court order, pending UDRP proceeding, etc. This may affect the registrar’s ability to transfer all of the activated variant domain name(s) from the same variant domain set together.”*

# D6a: Discussion Questions

**D6a: Should transfers ordered by the Uniform Domain Name Dispute Resolution Policy (UDRP) or any other dispute resolution mechanisms be treated the same way to follow the “same entity” requirement?**

1. Is Preliminary Recommendation 7 adequate to address charter question D6a? If not, what additional Recommendation or Implementation Guidance may be required to address this question?



## What is Uniform Domain Name Dispute Resolution Policy (UDRP)?

- Longest standing ICANN Consensus Policy (ICANN Board adoption in October 1999)
- Sets out the legal framework for the resolution of disputes between a domain name registrant and a third party over the abusive registration and use of a domain name in all gTLDs (some ccTLDs have voluntarily adopted this Policy)
- Administered by dispute resolution service providers accredited by ICANN, e.g., WIPO
- UDRP operation is based on two documents:
  - 1) Policy that sets out its scope, relief, and basis for mandatory administrative proceedings
  - 2) Rules that set out the procedural requirements that the administrative proceedings must follow

## Who can use UDRP?

- Any person or company can file a domain name complaint concerning a gTLD using the UDRP

## What types of disputes are covered by UDRP?

- Only available for disputes concerning an alleged abusive registration of domain name
- Must meet the following criteria:
  - Domain name is identical or confusingly similar to a trademark or service mark
  - Registrant has no rights or legitimate interests in respect of domain name in question
  - Domain name has been registered and is being used in bad faith

# UDRP Basics (Cont.)

## What are the various stages in the UDRP procedure?

The five basic stages are:

1. The filing of a Complaint with an ICANN-accredited dispute resolution service provider chosen by the Complainant
2. The filing of a Response by the person or entity against whom the Complaint was made
3. The appointment by the chosen dispute resolution service provider of an Administrative Panel of one or three persons who will decide the dispute
4. The issuance of the Administrative Panel's decision and the notification of all relevant parties
5. The implementation of the Administrative Panel's decision by the registrar(s) concerned should there be a decision that the domain name(s) in question be cancelled or transferred

## What decisions can the UDRP Administrative Panel take?

Only three types of decisions can be made by the Administrative Panel:

1. Decide in favor of the person or entity that filed the Complaint and **order that the disputed domain name(s) be transferred to that person or entity**
2. Decide in favor of the person or entity that filed the Complaint and **order that the disputed domain name(s) be cancelled**
3. Decide in favor of the domain name registrant (i.e., deny the requested remedy)

# UDRP Basics (Cont.)

## What is the registrar's role in the UDRP proceeding?

1. To provide **requested information** to the dispute resolution provider, including:
  - confirming disputed domain name is registered with it
  - confirming it is registered by the person or entity identified as the Respondent in the Complaint
  - providing the Respondent's contact details and, when necessary, the Registration Agreement and associated documents
2. To **prevent the transfer** to a third party of a domain name registration after an Administrative Proceeding has commenced
3. To **implement the Administrative Panel's decision**

## Can one still go to court if use the UDRP?

- Yes. It is possible for a party to start a lawsuit in court before a proceeding is commenced. A party can also commence a lawsuit after the proceeding is concluded if it is not satisfied with the outcome

Numbers below extracted from [ICANN org's UDRP Policy Status Report](#) submitted to the GNSO Council in September 2022:

- Total **UDRP cases filed ranged from 4,157 cases in 2013 to 6,271 in 2020**, with a total of 38,349 UDRP complaints involving 67,318 domain names filed with UDRP Providers
- January 2013 - December 2020:
  - **over 32,000 UDRP decisions have been rendered**
  - **Complainants succeeded in obtaining the disputed domain name in about 78% of cases**, on average, across all dispute resolution Providers
- 2014 - 2019:
  - Number of **UDRP-related tickets received by ICANN has slightly gone up**
  - ICANN's Global Support Center (GSC) received **8,056 UDRP-related inquiries**. Around 61% of these inquiries involved **issues related to a trademark holder alleging cybersquatting or IP infringing domain name registrations**

# Charter Question D7a

**D7a: Should the suspensions ordered by the Uniform Rapid Suspension System (URS) or any other dispute resolution mechanisms be treated the same way to follow the “same entity” requirement?**

# Phase 2 Preliminary Recommendation 6

**Preliminary Recommendation 6:** The “same entity” principle, as set out in Preliminary Recommendation 2, must be adhered to in all stages of the domain name lifecycle of the activated\* variant domain names in the same variant domain set. The grandfathered variant domain names pursuant to Preliminary Recommendation 3 are exempt from this requirement.

*\* Terminology (e.g., “activated” vs. “allocated”) to be confirmed after discussion of glossary*

**Rationale:** “...**Lock:** Lock placed on one domain name does not necessarily mean the other activated variant domain names from the same variant domain set have to be locked at the same time. However, the lock will likely disable transfer of the affected variant domain set, as set out in Preliminary Recommendation 7.”

**Suspension:** Suspension placed on one domain name does not necessarily mean the other activated variant domain names from the same variant domain set have to be suspended as well.”

# D7a: Discussion Questions

**D7a: Should the suspensions ordered by the Uniform Rapid Suspension System (URS) or any other dispute resolution mechanisms be treated the same way to follow the “same entity” requirement?**

1. Is Preliminary Recommendation 6 adequate to address charter question D7a? If not, what additional Recommendation or Implementation Guidance may be required to address this question?

## Purpose:

- Provide trademark owners with a **quick and low-cost process** to act against those **clear-cut cases** of intellectual property rights infringement and to combat cybersquatting
- **Complement to the UDRP**
- Substantive grounds upon for filing an URS Complaint are essentially similar to UDRP

**Fees:** Range from \$300-500 USD per proceeding

## Procedure:

- Trademark holders files a Complaint to initiate an URS proceeding with a Provider
- Registry operator immediately **locks the domain** against changes
- Provider notifies the registrant who has fourteen (14) days to submit a response

## Remedy:

- **Suspension of the domain name** for the balance of the registration period
- Complainant has the **option to extend suspension period** for one additional year

## Key Difference with UDRP:

- Standard of proof required to succeed on a claim: **preponderance of the evidence** for UDRP vs. **clear and convincing evidence** for URS
- Remedy: Cancellation or transfer of the domain name for UDRP vs. suspension of the domain name for URS
- More differences, see pp.90-98: <https://newgtlds.icann.org/sites/default/files/rpm-review-11sep15-en.pdf>



# URS Statistics (Compared against UDRP)

Year	UDRP Cases Filed Against Registrants	URS Cases Filed Against Registrants	UDRP Complaints to ICANN	URS Complaints to ICANN
2014	4,077	233	227	19
2015	4,192	220	250	11
2016	4,387	227	235	9
2017	4,561	163	213	12
2018	4,650	158	-	-

Source: <https://www.icann.org/resources/pages/cct-metrics-rpm-2016-06-27-en#1.9.a>

# Charter Question F2

**F2: In order to ensure that the “same entity” principle is maintained, what are the additional operational and legal impacts to the following RPMs that are not considered in the above charter questions, which mostly concern the outcomes or remedies of dispute resolution procedures or trademark protection mechanisms?**

- **TMCH and its Sunrise and Trademark Claims services**
- **URS**
- **TM-PDDRP (Trademark Post-Delegation Dispute Resolution Procedure)**
- **UDRP**

# Phase 1 Final Recommendation 7.11

**Final Recommendation 7.11:** In the event a gTLD is reassigned as a result of a TM-PDDRP determination, that reassignment must include all allocated and delegated variant label(s) of the gTLD, if any, at the same time.

# Deliberate on Variant Domain Name Registration Data

D8

# Charter Question D8

**D8: What should be included in the WHOIS/RDAP for variant domain names (both the IANA whois and the Registry WHOIS)?**

# D8: Discussion Questions

**D8: What should be included in the WHOIS/RDAP for variant domain names (both the IANA whois and the Registry WHOIS)?**

1. Are there any additional data element(s) needed with respect to variant domain names?
2. If the answer is “yes” to question 1, what data elements?
3. If the answer is “yes” to question 1, how should they be treated? (e.g., collected, generated, transferred, disclosed)

# Terminology Basics

- **WHOIS:** The protocols, services, and data types associated with Internet naming and numbering resources including domain names, IP addresses, and Autonomous System Numbers (ASNs)
  - WHOIS protocol dates back to 1982, well before ICANN was established in 1998
  - ICANN began to standardize WHOIS terminology in 2011 to address its ambiguities and various technical issues
  - WHOIS requirements will be phased out in 2025 for gTLD registries and registrars
- **Domain Name Registration Data:** Information that is collected or generated in relation to a registered domain name
- **Registration Data Directory Services (RDDS):** Collective services offered by registries and registrars to provide access to registration data
  - A set of independently operated and distributed databases responsible for their portion of the Internet's identifiers
- **Registration Data Access Protocol (RDAP):** A protocol that delivers registration data like WHOIS, but its implementation will change and standardize data access and query response formats
  - Meant as a replacement for the WHOIS protocol as the ecosystem evolved and WHOIS became decentralized
  - Designed to address the limitations of the WHOIS protocol in terms of scalability, extensibility, and security
  - Parallel development in ICANN and IETF of RDAP from 2012-2019
  - Driven by external factors, e.g., European Union's General Data Protection Regulation (GDPR)

# ICANN's Role in Registration Data and Services

- ICANN performs the **role of coordinator** of the decentralized databases that make up WHOIS/RDDS
- ICANN **gained authority gradually over time** as the Internet and the organization's role evolved
  - **2001:** ICANN signed the first Registrar Accreditation Agreement (RAA) with registrars, which included provisions related to WHOIS data collection, storage, and dissemination
    - Required registrars to abide by any ICANN specification or Consensus Policy from ICANN community with respect to WHOIS
  - **2002:** Replaced Domain Name Supporting Organization (DNSO) with Generic Name Supporting Organization (GNSO), which has been the home for consensus policy making related to registration data and RDDS
  - **2009:** ICANN signed Affirmation of Commitments with US Department of Commerce
    - *9.3.1 ICANN additionally commits to enforcing its existing policy relating to WHOIS, subject to applicable laws. Such existing policy requires that **ICANN implement measures to maintain timely, unrestricted and public access to accurate and complete WHOIS information, including registrant, technical, billing, and administrative contact information...***
- ICANN requires accredited registrars and gTLD registries to **comply with technical specifications for their RDDS, as described in ICANN's contracts**
- ICANN operates a free **Registration Data Lookup Tool** that allows users to look up publicly available registration data



# ICANN Policy Efforts Related to Registration Data (2003-2005)

- **WHOIS Task Force**
  - WHOIS Data Reminder Policy
  - The Restored Name Accuracy Policy
  - WHOIS Marketing Restriction Policy
- **WHOIS Policy Review Team**
  - Accuracy Reporting System
- **Inter-Registrar Transfer Policy PDP**
  - Additional WHOIS Information Policy
  - Thick WHOIS
    - Registry Registration Data Directory Services Consistent Labeling and Display Policy
    - Thick WHOIS Transition Policy for .COM, .NET, .JOBS
- **Privacy and Proxy Services Accreditation Issues PDP**
- **Translation and Transliteration of Contact Information PDP**

# GDPR Impact, Temp Spec, EPDP

- **European Union's General Data Protection Regulation (GDPR)** came into effect in May 2018:
  - A comprehensive data protection law that applies to all companies that process the personal data of EU residents, regardless of where those companies are based
  - **Personal data** must be processed in a way that is fair, transparent, and respects the rights of data subjects
  - Concerns that the **publication of registrant data** in WHOIS may not be compliant with the GDPR
- ICANN Board adopted the **Temporary Specification for gTLD Registration Data** in May 2018, which modifies existing requirements in the RAA and RA to comply with GDPR as an **interim measure**
  - Continued collection of registration data, e.g., registrant info, administrative contacts, technical contacts
  - Limited the amount of **personal data that could be collected and published** in WHOIS
  - **Restricted access to / disclosure of non-public registration data (e.g., personal data)**
- GNSO initiated an EPDP to develop a **long-term policy for the handling of registration data** in light of GDPR
  - **Phase 1:** Determine if Temporary Specification should be adopted as an ICANN Consensus Policy, either as-is or with modifications
  - **Phase 2:** Define requirements for a System for Standardized Access/Disclosure (SSAD) for nonpublic registration data; address deferred issues and legal guidance from Phase 1
  - **Phase 2A:** Discuss remaining issues from Phase 2

# GDPR Impact, Temp Spec, EPDP (Cont.)

- **EPDP-Temp Spec Outcomes:**
  - **Phase 1: Recommends continuation of the Temporary Specification as an interim Consensus Policy**
    - Board adoption in May 2019
    - Establishment of **Interim Registration Data Policy for TLDs**, which mandates registries and registrars continue to adhere to measures consistent with the Temporary Specification until the **Registration Data Policy** is implemented
  - **Phase 2: 22 recommendations for the SSAD and non-public gTLD registration data**
    - GNSO Council adoption in Sep 2020
    - GNSO Council consultation with ICANN Board on SSAD's financial sustainability led to the creation of **Registration Data Request Service (RDRS)** to simplify process of requesting and receiving non public registration data in a cost-effective manner
    - Board paused consideration for SSAD no more than two years after RDRS goes into operation

# Registration Data Consensus Policy

- An ICANN Consensus Policy developed to comply with GDPR & consider other privacy/data protection laws
- Draft policy language published in August 2022 for Public Comment, outlining requirements related to **collection, transfer, publication of registration data**
- **20 impacted policies and procedures** need to be updated to align with the RegData Policy
- After **policy effective date (TBD 2025)**, all contracted parties must comply with the RegData Policy

The following slides include relevant draft language (absolute “MUST” items) of the RegData policy  
version: 13 November 2023

# Collection of RegData

## 6.1. Registrar **MUST** collect or generate (marked with an asterisk) values for the following data elements:

- 6.1.1. Domain Name
- 6.1.2. Registrar Whois Server\*
- 6.1.3. Registrar URL\*
- 6.1.4. Registrar\*
- 6.1.5. Registrar IANA ID\*
- 6.1.6. Registrar Abuse Contact Email\*
- 6.1.7. Registrar Abuse Contact Phone\*
- 6.1.8. Domain Status(es)\*
- 6.1.9. Registrant Name
- 6.1.10. Registrant Street
- 6.1.11. Registrant City
- 6.1.12. Registrant State/Province
- 6.1.13. Registrant Postal Code
- 6.1.14. Registrant Country
- 6.1.15. Registrant Phone
- 6.1.16. Registrant Email
- 6.1.17. Registrar Registration Expiration Date\*

# Transfer of RegData from Registrar to Registry Operator

## 7.1. Registrar **MUST** transfer the following data elements to Registry Operator:

- 7.1.1. Domain Name
- 7.1.2. Registrar URL
- 7.1.3. Registrar
- 7.1.4. Registrar IANA ID
- 7.1.5. Registrar Abuse Contact Email
- 7.1.6. Registrar Abuse Contact Phone
- 7.1.7. Domain Status(es)

# Transfer of RegData to Data Escrow Providers

**8.1. Registrar MUST submit an electronic copy, in a format specified by ICANN, of the following data elements to an ICANN-approved data escrow agent:**

- 8.1.1. Domain Name
- 8.1.2. Registrar Registration Expiration Date
- 8.1.3. Registrar IANA ID
- 8.1.4. Registrant Name
- 8.1.5. Registrant Street
- 8.1.6. Registrant City
- 8.1.7. Registrant State/Province
- 8.1.8. Registrant Postal Code
- 8.1.9. Registrant Country
- 8.1.10. Registrant Phone
- 8.1.11. Registrant Email

# Transfer of RegData to Data Escrow Providers (Cont.)

**8.4. Registry Operator MUST submit an electronic copy, in a format specified by ICANN, of the following data elements to an ICANN-approved data escrow agent:**

- 8.4.1. Domain Name
- 8.4.2. Registry Domain ID
- 8.4.3. Registrar URL
- 8.4.4. Creation Date
- 8.4.5. Registry Expiry Date
- 8.4.6. Registrar
- 8.4.7. Registrar IANA ID
- 8.4.8. Registrar Abuse Contact Email
- 8.4.9. Registrar Abuse Contact Phone
- 8.4.10. Domain Status(es)



# Publication of Domain Name RegData (Minimum Dataset)

**9.1.1. In responses to RDDS queries, Registrar and Registry Operator MUST Publish the following data elements:**

9.1.1.1. Domain Name

9.1.1.2. Registrar URL

9.1.1.3. Creation Date

9.1.1.4. Registry Expiry Date (exception: Registrar MAY Publish)

9.1.1.5. Registrar Registration Expiration Date (exception: Registry Operator MAY Publish)

9.1.1.6. Registrar

9.1.1.7. Registrar IANA ID

9.1.1.8. Registrar Abuse Contact Email

9.1.1.9. Registrar Abuse Contact Phone

9.1.1.10. Domain Status(es)

9.1.1.11. Last Update of RDDS

# Redaction Requirements for Publication of RegData

## 9.2.1 Registry Operator and Registrar:

(a) MUST apply the requirements of Section 9.2 in RDDS if redaction of Personal Data contained in Registration Data is required in order to comply with applicable law

**9.2.2.1. Where Registry Operator or Registrar applies the requirements in Section 9.2.1, it MUST Redact the values for the following data elements subject to the exceptions outlined in the following subsections:**

- 9.2.2.1.1. Registry Domain ID
- 9.2.2.1.2. Registry Registrant ID
- 9.2.2.1.3. Registrant Name
- 9.2.2.1.4. Registrant Street
- 9.2.2.1.5. Registrant Postal Code
- 9.2.2.1.6. Registrant Phone
- 9.2.2.1.7. Registrant Phone Ext
- 9.2.2.1.8. Registrant Fax
- 9.2.2.1.9. Registrant Fax Ext
- 9.2.2.1.10. Registry Tech ID
- 9.2.2.1.11. Tech Name
- 9.2.2.1.12. Tech Phone

**9.2.2.2. Where Registry Operator applies the requirements in Section 9.2.1, Registry Operator MUST Redact the values for the following data elements:**

- 9.2.2.2.1. Registrant Email
- 9.2.2.2.2. Tech Email

## D8: Discussion Questions (TBC)

**D8: What should be included in the WHOIS/RDAP for variant domain names (both the IANA whois and the Registry WHOIS)?**

1. What specific data element(s), if any, should registrars collect or generate with respect to variant domain names?
2. What specific data element(s) with respect to variant domain names, if any, should registrars transfer to a registry operators?
3. What specific data element(s) with respect to variant domain names, if any, should registrars transfer to data escrow providers?
4. What specific data element(s) with respect to variant domain names, if any, should registry operators transfer to data escrow providers?
5. What specific data element(s) with respect to variant domain names, if any, should be published by registrars and registry operators in responses to RDDS queries?

# Deliberate on IDN Implementation Guidelines

G1, G1a

# Charter Questions G1 & G1a

**G1: What should be the proper vehicle to update the IDN Implementation Guidelines?**

**G1a: Given that the contracted parties are contractually bound to adhere to the IDN Implementation Guidelines, is there a need for a separate legal mechanism specifically for the implementation of IDNs among gTLDs, as well as a general guideline for any registry (including ccTLD registries) that wishes to implement IDNs?**

# IDN Implementation Guidelines Basics

## What:

- Best practices document including standards for registries & registrars that deploy IDN registration policies
- Reflect protocol updates through the IETF
- Address IDN registration policies and practices, minimize risk of cybersquatting and consumer confusion, and respect interests of communities using local languages and scripts

## Why:

- ICANN authorization is required to accept IDN domain registrations under gTLDs on the basis of these guidelines
- Provide a coordinated approach to improve registration practices and the usage of IDNs at the second level
- Aim to be used deeper into the DNS hierarchy and within TLD's where ICANN has a lesser policy relationship
- Contribute to the continued openness, interoperability, resilience, security and stability of the DNS

## Who (for):

- Contractually required for gTLD registries and registrars offering IDN registrations are contractually to implement
- Encouraged to follow / use as a support document by other registries (e.g., ccTLD managers)

## Who (by):

- Jointly developed by community experts (e.g., registries, registrars, language experts, etc.) and ICANN staff
- Consultative, collaborative, community-based process via a working group mechanism

# Contractual Obligations for gTLDs

## Registry Agreement Specification 6, Section 1.4

**IDN.** If the Registry Operator offers Internationalized Domain Names (“IDNs”), it shall comply with RFCs 5890, 5891, 5892, 5893 and their successors. **Registry Operator shall comply with the ICANN IDN Guidelines at <<http://www.icann.org/en/topics/idn/implementation-guidelines.htm>>, as they may be amended, modified, or superseded from time to time.** Registry Operator shall publish and keep updated its IDN Tables and IDN Registration Rules in the IANA Repository of IDN Practices as specified in the ICANN IDN Guidelines.

## 2013 Registrar Accreditation Agreement Additional Registrar Operation Specification, Clause 3

If the Registrar offers Internationalized Domain Name (“IDN”) registrations, all new registrations must comply with RFCs 5890, 5891, 5892, 5893 and their successors. **Registrar shall also comply with the IDN Guidelines at <http://www.icann.org/en/topics/idn/implementation-guidelines.htm> which may be amended, modified, or superseded from time to time.** Registrar must use the IDN Tables published by the relevant registry.

# Expectations for ccTLDs

## IDN ccTLD Fast Track Process

- ICANN expects that IDN ccTLDs will be established and operated in the manner described below:
  - b. IDN domain names are to be registered in accordance with a publicly available registration policy that **shall comply on an ongoing basis...with the IDN guidelines as updated and published from time to time on the ICANN website, all subject to and within the limits of relevant applicable national law and public policy**. This includes, but is not limited to, adherence to RFCs 3490, 3491, 3492, 3454 and their successors
- Commitments of [IDN ccTLD SO]. [IDN ccTLD SO] **shall use its best endeavours to:**
  - c. **Adherence to relevant IDN standards and guidelines:** register IDN domain names in accordance with its publicly available registration policy which shall comply on an ongoing basis...**with the IDN guidelines as updated and published from time to time on the ICANN website, all subject to and within the limits of relevant applicable national law and public policy**. This includes, but is not limited to, adherence to RFCs 3490, 3491 3492, 3454 and their successors.

## ccPDP4 Initial Report

...it is strongly suggested that IDNccTLD Managers are expected (but not required) to...**be guided by the Guidelines for the Implementation of Internationalized Domain Names applicable at the time**. The IDN Table or Tables are expected to be published and included in IANA IDN Practices Repository in accordance with the relevant and applicable procedures at the time the selected IDNccTLD and/or its variant(s) is requested.



# Update Process

- Between 2003 and 2022, seven (7) versions of IDN IG were published
- Guidelines are reviewed and revised as necessary, not on a regular basis, generally due to:
  - Change to relevant protocols
  - Demand from the Board and community
  - Experience gained as deployment of IDNs proceeds
- Revision based on the following principles:
  - Maximize the ability of a registry to support IDN in all regards where it is reasonably needed
  - Minimize the ability for the abuse of IDN for deceptive purposes
- Major steps in the update process include:
  - Public Comment on draft version
  - Board consideration/adoption of final version
- Follow an open and transparent process in [publishing](#) each version



# Version 1.0

	Reasons for Development	Community Contributors	Additional Notes
<b>V1.0 (27 Mar 2003)</b>	<ul style="list-style-type: none"><li>To enable ICANN to begin authorizing registries to deploy IDN registrations</li></ul>	<ul style="list-style-type: none"><li>Internationalized Domain Name Registry Implementation Committee (IDN-RIC)</li></ul>	<ul style="list-style-type: none"><li>Draft presented at ICANN16 Public Forum on 26 Mar 2003</li><li>Subject to further editing and communications with the Internet Architecture Board</li><li>.cn, .info, .jp, .org, and .tw registries committed to abide these Guidelines</li></ul>

# Versions 2.0, 2.1, 2.2

	Reasons for Development	Community Contributors	Additional Notes
<b>V2.0</b> <b>(8 Nov 2005)</b>	<ul style="list-style-type: none"> <li>• Result of detailed review of V1 at an IDN workshop in Jul 2005</li> <li>• Increased spoofing attacks in relation to IDN domains</li> <li>• To limit deceptive use of visually confusable characters from different scripts in IDN labels</li> </ul>	IDN TLD Working Group (TLD registries with IDN experience) <ul style="list-style-type: none"> <li>• gTLD:               <ul style="list-style-type: none"> <li>○ MuseDoma</li> <li>○ VeriSign</li> <li>○ Afilias</li> </ul> </li> <li>• ccTLD:               <ul style="list-style-type: none"> <li>○ JPRS;</li> <li>○ .sd Registry</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• V2.0 was effective for nine (9) months</li> </ul>
<b>V2.1</b> <b>(27 Feb 2006)</b>	<ul style="list-style-type: none"> <li>• ICANN Board asked for specific IDN improvement recommendations before ICANN26 in June 2006</li> </ul>		<ul style="list-style-type: none"> <li>• Revised V2.0 incrementally</li> <li>• V2.1 was effective for six (6) months</li> <li>• Reduced the amount of strongly prescriptive wording</li> </ul>
<b>V2.2</b> <b>(26 Apr 2007)</b>	<ul style="list-style-type: none"> <li>• To consider technical and policy factors in preparation for the introduction of IDN at top-level</li> </ul>		<ul style="list-style-type: none"> <li>• Earlier guidelines written for the second-level that can be applied to the top-level</li> <li>• Recognize need for periodic review of relevant issues and making corresponding modifications</li> <li>• Plan to seek formal IETF status</li> </ul>

# Version 3.0

	Reasons for Development	Community Contributors	Additional Notes
<b>V3.0 (28 Oct 2011)</b>	<ul style="list-style-type: none"><li>• To reflect the IDNA2008 protocol (a technical standard for the implementation of IDNs for registries, registrars, and software developers)</li><li>• To allow new IDN ccTLD registries launched through the 2009 Fast Track Process and the existing gTLD registries offering IDN registrations to adopt the latest version</li></ul>	<p>IDN Guidelines Revision Working Group (TLD registries with IDN experience)</p> <ul style="list-style-type: none"><li>• gTLD:<ul style="list-style-type: none"><li>○ MuseDoma</li><li>○ VeriSign</li><li>○ Afilias</li></ul></li><li>• ccTLD:<ul style="list-style-type: none"><li>○ JPRS;</li><li>○ Qatar Domains Registry (ictQATAR)</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Supercede V2.0</li></ul>

# Version 4.0

	Reasons for Development	Community Contributors	Additional Notes
<b>V4.0 (10 May 2018)</b>	<ul style="list-style-type: none"><li>• To reflect significant experience accumulated on IDN implementation, following DNS expansion as a result of New gTLD Program 2012 Round and IDN ccTLD Fast Track Process:<ul style="list-style-type: none"><li>○ Terminology around IDNs</li><li>○ Definition and formal representation of IDN Tables through RFC 7940</li><li>○ Principles to design label generation rules in RFC 6912, RFC 8228</li><li>○ Additional analysis and data, incl. Maximal Starting Repertoire (MSR)</li></ul></li><li>• To incorporate SSAC advice to support consistency &amp; manageability of variant labels (e.g., SAC60)</li><li>• To incorporate the script communities' work on RZ-LGR and Reference LGR</li><li>• ICANN Board Variant Working Group advised update in Jun 2014</li></ul>	<p>IDN Guidelines Working Group (IDNGWG) (appointments made following the call for expert volunteers)</p> <ul style="list-style-type: none"><li>• ALAC (2)</li><li>• ccNSO (2)</li><li>• GNSO (6)</li><li>• SSAC (1)</li></ul>	<ul style="list-style-type: none"><li>• Supercede V3.0</li><li>• Major procedural steps:<ol style="list-style-type: none"><li>1. Mar 2016: Initial issues list presented at ICANN55</li><li>2. Nov 2016: Interim draft presented at ICANN57</li><li>3. Mar 2017: Complete draft published for public comment &amp; presented at ICANN58</li><li>4. Nov 2017: Final draft presented at ICANN60</li><li>5. Dec 2017: Final draft published for public comment</li><li>6. Mar 2018: Second public comment analysis presented at ICANN61</li><li>7. May 2018: Final proposed draft V4.0 published for Board consideration</li></ol></li></ul>

# Version 4.1

	Reasons for Development	Community Contributors	Additional Notes
<b>V4.1 (22 Sep 2022)</b>	<ul style="list-style-type: none"><li>• Aug 2021: GNSO Council requested Board to defer consideration of V4.0 in its entirety due to:<ul style="list-style-type: none"><li>○ Overlapping subject matter with EPDP-IDNs</li><li>○ RySG’s analysis that new requirements do not impact security / stability</li></ul></li><li>• Jan 2022: GNSO Council identified guidelines <b>6a, 11, 12, 13, and 18</b> that overlap with EPDP-IDNs charter</li><li>• Sep 2022: ICANN Board approved deferral of the GNSO Council identified guidelines until completion of EPDP-IDNs; adopted the remaining items for implementation as V4.1</li></ul>	<p>IDN Guidelines Working Group (IDNGWG) (expert volunteers)</p> <ul style="list-style-type: none"><li>• ALAC (2)</li><li>• ccNSO (2)</li><li>• GNSO (6)</li><li>• SSAC (1)</li></ul>	<ul style="list-style-type: none"><li>• Implementation in two phases:<ul style="list-style-type: none"><li>○ Phase 1: all items except for deferred ones, effective 6 months post approval</li><li>○ Phase 2: deferred items, effective 18 months post approval</li></ul></li><li>• V4.1 has a fiscal impact both on ICANN org and the community<ul style="list-style-type: none"><li>○ ICANN org to develop additional processes and tools to be able to determine effectiveness of implementation</li><li>○ Registry operators to update their registration policies and practices to address V4.1</li></ul></li></ul>

# Summary of Obligations in v4.1 vs. v.3

- **Guidelines 1-3 (update):** TLD registries that support IDNs **must** do so in strict compliance with IDNA2008 (already in the Base Registry Agreement since 2013).
  - Follow RFCs 5890, 5891, 5892 and 5893 or any RFC that replaces or updates the listed RFCs.
    - Example: ‘**·com**’, the code point **·**(U+30FB, KATAKANA MIDDLE DOT) requires at least one character in the label to be in Hiragana, Katakana, or Han scripts.
  - **Not allow exceptions** for registrations that are IDNA2003 compliant but not IDNA2008 compliant.
    - Example: ‘**√**’ (U+221A), ‘**△**’ (U+267A), ‘**Ⓢ**’ (U+2706), these were PVALID in IDNA2003 but DISALLOWED in [IDNA2008](#)
  - When a pre-existing domain name requires transitional exception, the terms of that action **must** also be made readily available online.

# Summary of Obligations in v4.1 vs. v.3 (Cont.)

- **Guidelines 4 (no change):** No label containing hyphens in both the third and fourth positions **may** be registered unless it is a valid A-label
  - Example: “0-----0”, “a---b”, “ok--computer”
- **Guidelines 5 (update terminology):** A TLD registry **must** publish one or several repertoires of Unicode code points that are permitted for registration and **must not** accept the registration of any domain name containing an unlisted code point. Each such list **must** indicate the script or language(s) it is intended to support.
- **Guidelines 6 (no change):** IDN Tables **must** be placed in the IANA Repository for IDN Practices.
- **Guidelines 6(c) (update terminology):** The IDN Table **must** include the complete repertoire of code points, any IDN variant code points and any applicable contextual rules which the TLD registry uses to determine if an IDN label is acceptable for registration.



# Summary of Obligations in v4.1 vs. v.3 (Cont.)

- **Guidelines 8 (new and aligned with the current practice):** TLD registries **may** use [Second Level Reference Label Generation Rules \(LGRs\)](#) as is or as a reference. IDN Tables **may** deviate from Reference Second Level LGRs. Notwithstanding the foregoing, registries seeking to implement IDN Tables (i.e. new or modifications of existing ones) that pose any security and/or stability issues **must not** be implemented.
  - Notes:
    - This guideline only affects new IDN Tables or the updated IDN Tables of the TLD.
    - The previously approved IDN Tables for the TLD will not be affected by the implementation of this guideline. Any security issues found in the previously approved IDN Table of a TLD have been communicated separately and TLD registries are encouraged to address the issues.

# Summary of Obligations in v4.1 vs. v.3 (Cont.)

- **Guidelines 10 (no change):** Any information fundamental to the understanding of a TLD registry's IDN policies that is not published by IANA **must** be made directly available online by the TLD registry.
- **Guidelines 15 (no change):** All code points in a single IDN label **must** be taken from the same Unicode script as determined by the Unicode Standard. Exceptions are **permissible** for languages with established orthographies and conventions that require the commingled use of multiple Unicode scripts.
  - Example of violation: ‘paypal’ (U+0070 U+0061 U+0079 U+0440 U+0061 U+006C), the mix of Cyrillic and Latin scripts in a label is not allowed.
- **Guidelines 16 (no change):** In the case of any exceptions made allowing mixing of Unicode scripts, visually confusable characters from different scripts **must not** be allowed to co-exist in a single set of permissible code points **unless** a corresponding IDN policy and IDN Table is clearly defined to minimize confusion between domain names.

# G1: Discussion Questions

## G1: What should be the proper vehicle to update the IDN Implementation Guidelines?

1. Are the triggers for new version development / update appropriate? Should the EPDP-IDNs Team recommend any specific trigger for future update?
2. Should the working group mechanism continue for developing future versions? If so, what improvements should be made (if any)? If not, what alternative mechanism should be used?
3. Is it appropriate to continue including any new requirements that are mandatory in future versions? Should they be developed through other mechanisms (e.g., PDP, contractual negotiations between ICANN and contracted parties)?

# G1a: Discussion Questions

**G1a: Given that the contracted parties are contractually bound to adhere to the IDN Implementation Guidelines, is there a need for a separate legal mechanism specifically for the implementation of IDNs among gTLDs, as well as a general guideline for any registry (including ccTLD registries) that wishes to implement IDNs?**

1. Given that there are existing legal mechanism to develop contractual obligations (e.g., PDPs, IDN Implementation Guidelines), is there a need for a separate legal mechanism specifically for implementation of IDNs among gTLDs?
2. The IDN Implementation Guidelines are intended as the best current practice for other non-gTLD registries (including ccTLDs), and intended to be used deeper into the DNS hierarchy and within TLD's where ICANN has a lesser policy relationship. Given this background, is there a need to create a general guideline for other non-gTLD registries that wish to implement IDNs?

# IDN Implementation Guidelines V4.0

Discuss Deferred Guidelines

# Guideline 6a

IDN Implementation Guideline V4.0	EPDP-IDNs Charter Question(s)
<p><b>6a:</b> IDN Tables must be placed in the IANA Repository for IDN Practices. Further: (a) Except as applicable in 6(b) below, registries must use RFC 7940: Label Generation Ruleset (LGR) Using XML format to represent an IDN Table.</p>	<p><b>c6:</b> Should Registry Operators be required to use the machine readable LGR format as specified in RFC 7940 for their second-level IDN tables? Or should Registry Operators have the flexibility to resolve the harmonization issue so long as it can predictably and consistently produce the same variant labels, albeit with different disposition values, across the same-script IDN tables?</p>

## No Preliminary Recommendation

### **Response Summary:**

The EPDP Team agreed to not recommend the machine readable XML format, as specified in RFC 7940, as the required format for IDN Tables. Existing and future registry operators should have the flexibility to determine the appropriate format of their IDN Tables. The EPDP Team reviewed the evolution of IDN Table formats as recommended by relevant RFCs and understood that there are different ways to represent the second-level rules under gTLDs.

# Guideline 11

IDN Implementation Guideline V4.0	EPDP-IDNs Charter Question(s)
<p><b>11:</b> IDN Variant Labels generated by an IDN Table must be either (a) allocatable only to the same registrant as the primary IDN label, or (b) blocked from registration.</p>	<p><b>c1:</b> Both the SubPro PDP and the Staff Paper recommend that: 1) a given second-level label beneath each allocated variant TLD must have the “same entity”; and 2) all allocatable second level IDN variant labels that arise from a registration based on a second-level IDN table must have the “same entity”. Should this recommendation be extended to existing second-level labels?</p> <p><b>c2:</b> Currently Registry Operators may activate the IDN variant labels at the second-level when requested by the sponsoring Registrar of the canonical name as described in the IDN Tables and IDN Registration Rules. Both the SubPro PDP and the Staff Paper recommend that at the second-level, the same entity definition can be achieved by ensuring that the registrant is the same. Should this recommendation be extended to the already activated IDN variant labels at the second-level? How does the “same entity” requirement impact the current rules for Registry Operators for activating IDN variant labels?</p>



# EPDP-IDNs Deliberation: C1 & C2

**Preliminary Recommendation 2**: The “same entity” principle applies to the activation\* of future variant domain names. This means that all allocatable variant domain names from a variant domain set must be activated\* or withheld for possible activation\* only to the same registrant at the same sponsoring registrar.

*\* Terminology (e.g., “activation” vs. “allocation”) to be confirmed after discussion of glossary*

**Preliminary Recommendation 3**: Immediately prior to the policy effective date of the “same entity” principle as set out in Preliminary Recommendation 2, the existing variant domain names that do not conform to the “same entity” principle must be grandfathered. This means that there will be no change to the contractual or activation status of such existing variant domain names. The requirement of having the same registrant and the same sponsoring registrar will not be applied retroactively.

**Preliminary Recommendation 4**: Any allocatable variant domain names of grandfathered domain names pursuant to Preliminary Recommendation 3 cannot be activated unless and until only one registrant and one sponsoring registrar remain for the grandfathered domain name(s) from the relevant variant domain set.

# Guideline 12

IDN Implementation Guideline V4.0	EPDP-IDNs Charter Question(s)
<p><b>12:</b> TLD Registries may activate an IDN Variant Label, provided that i) such IDN Variant Label is requested by the same registrant or corresponding registrar as the Primary IDN Label, ii) such IDN Variant Label is registered to the registrant of the Primary IDN Label, and iii) such IDN Variant Label conforms with the registry policy and IDN Tables.</p> <p>In exceptional cases, i) to support a widely acceptable practice within Internet users of a language or script community, or ii) to abide by language or script established conventions, a TLD Registry may opt to activate a limited number of IDN Variant Labels at its discretion, according to its policies. <b>In such cases, the TLD Registry must have mechanism to limit automatic activation of IDN Variant Labels to a minimum.</b></p> <p><b>Note:</b> For example, automatic activation may be considered acceptable practice for Chinese language.</p>	<p><b>c2:</b> Currently Registry Operators may activate the IDN variant labels at the second-level when requested by the sponsoring Registrar of the canonical name as described in the IDN Tables and IDN Registration Rules. Both the SubPro PDP and the Staff Paper recommend that at the second-level, the same entity definition can be achieved by ensuring that the registrant is the same. Should this recommendation be extended to the already activated IDN variant labels at the second-level? How does the “same entity” requirement impact the current rules for Registry Operators for activating IDN variant labels?</p>

See Preliminary Recommendations 2, 3, 4

**Discussion Question (TBC):**

1. Should the EPDP Team develop any Recommendation or Implementation Guidance with respect to the automatic activation of variant domain names?

# Guideline 13

## IDN Implementation Guideline V4.0

**13:** TLD registries must ensure that all applicable IDN Tables with an IDN variant policy for a particular TLD have **uniform IDN variant code points** that properly account for symmetry and transitivity properties of all IDN variant code point sets across these IDN Tables. Exceptions to this guideline vis-à-vis symmetry and transitivity properties should be clearly documented in the TLD registries' public policy. At the same time, **TLD registries shall reevaluate potential variant relationships that may require to create new IDN variant code point sets due to the introduction of additional IDN Tables by the TLD registry.**

### Note:

- The use of “uniform” here means that (i) two IDN variant code points or IDN variant code point sequences in one IDN Table cannot be non-IDN-variant code points or non-IDN-variant code point sequences in another IDN Table implemented under the same TLD, and (ii) **all code points in all the IDN Tables under the same TLD must be collectively considered for analysis of IDN variants of code points for each of these IDN Tables.** These two measures are suggested to prevent cases of IDN Variant Labels being generated by different IDN Tables under the same TLD to be allocated to different registrants.
- **Registries may use relevant work for the Root Zone LGR and other sources to determine the IDN variant code point sets.**

## EPDP-IDNs Charter Question(s)

**c4:** Should the second-level IDN tables offered under a TLD, including IDN variant TLDs, be required to be mutually coherent? If yes, how should existing registrations which may not meet the “mutually coherent” requirement of second-level IDN tables be addressed? Rationale must be clearly stated.

# EPDP-IDNs Deliberation: C4

**Preliminary Recommendation 1**: All of the existing and future IDN Tables for a given gTLD and its variant gTLDs must be harmonized. This means that all of the IDN Tables for a gTLD and its variant gTLDs must produce a consistent variant domain set for a given second-level label registered under that gTLD or its variant gTLD(s).

## **Discussion Question (TBC)**:

1. Has Preliminary Recommendation 1 addressed the following:
  - a. reevaluate potential variant relationships that may require to create new IDN variant code point sets due to the introduction of additional IDN Tables by the TLD registry?
  - b. all code points in all the IDN Tables under the same TLD must be collectively considered for analysis of IDN variants of code points for each of these IDN Tables?
2. If not, should the EPDP Team develop any Recommendation or Implementation Guidance with respect to these gaps? This question can be considered in conjunction with the next agenda item: “Complete discussion of IDN Table Harmonization”.

# Guideline 18

IDN Implementation Guideline V4.0	EPDP-IDNs Charter Question(s)
<p><b>18:</b> TLD Registries should publish IDN policies or guidance related to registration of IDN labels at publicly accessible location on the TLD Registry's website.</p> <p>In addition to general policies or guidance on IDN registrations, these should include the following:</p> <ul style="list-style-type: none"><li>(a) A timeline related to resolution of transitional matters, if applicable</li><li>(b) IDN Variant Label allocation policy, if applicable</li><li>(c) IDN Variant Label automatic activation policy, if applicable</li><li>(d) Policy for minimizing Whole-Script Confusables and data sources used, if applicable</li><li>(e) IDN Table as per Guideline 6 above</li></ul>	<p>Related to deliberation of charter questions <b>C1, C2, C4, and C6</b></p>

## Complete Discussions

- a. IDN Table Harmonization (Preliminary Recommendation 1)
- b. Deletion of Source Domain Name (Preliminary Recommendation 5)

# Phase 2 Preliminary Recommendation 1

**Preliminary Recommendation 1**: All of the existing and future IDN Tables for a given gTLD and its variant gTLDs must be harmonized. This means that all of the IDN Tables for a gTLD and its variant gTLDs must produce a consistent variant domain set for a given second-level label registered under that gTLD or its variant gTLD(s).

**Rationale:** “...The EPDP Team had extensive discussion on the meaning and implication of IDN Table harmonization. They understood that the goal of harmonization is to **ensure that all of the IDN Tables for a given gTLD must produce the consistent variant domain set that arises from a registration at the second-level**. In other words, no matter which IDN Table for whatever language or script is used for a gTLD, the variant domain set produced for the requested label must be consistent in all of the IDN Tables for that gTLD as well as its variant gTLD(s), if any.”



# What is Harmonization

## Suggested in IDN Implementation Guidelines V4.0 Guideline 13:

TLD registries must ensure that all applicable IDN Tables with an IDN variant policy for a particular TLD have **uniform** IDN variant code points that properly account for symmetry and transitivity properties of all IDN variant code point sets across these IDN Tables.

- The use of “uniform” here means that:
  - (i) two IDN variant code points or IDN variant code point sequences in one IDN Table cannot be non-IDN variant code points or non-IDN-variant code point sequences in another IDN Table implemented under the same TLD, and
  - (ii) all code points in all the IDN Tables under the same TLD must be collectively considered for analysis of IDN variants of code points for each of these IDN Tables
- These two measures are suggested to prevent cases of IDN Variant Labels being generated by different IDN Tables under the same TLD to be allocated to different registrants

# Process vs. Data

## Suggested in IDN Implementation Guidelines V4.0 Guideline 13:

### Both “process” and “data” are equally important

- **Process:** TLD registries must ensure that all applicable IDN Tables with an IDN variant policy for a particular TLD have uniform IDN variant code points that properly account for symmetry and transitivity properties of all IDN variant code point sets across these IDN Tables
- **Data:** At the same time, TLD registries shall re-evaluate potential variant relationships that may require to create new IDN variant code point sets due to the introduction of additional IDN Tables by the TLD registry
  - **Note:** Registries may use relevant work developed by the script user community in the Root Zone LGR and other sources to determine the IDN variant code point sets

# Examples of Variant Code Points Identified by Script User Communities

#	Script Pairing	Code Point with Potential Security Issue	# of overall code points available for registrations
1	Latin - Cyrillic	<p><b>epic</b> U+0065 (e) U+0070 (p) U+0069 (i) U+0063 (c)  <b>epic</b> U+0435 (e) U+0440 (p) U+0456 (i) U+0441 (c)</p> <p>.....</p> <p><b>pay</b> U+0070 (p) U+0061 (a) U+0079 (y)  <b>pay</b> U+0440 (p) U+0430 (a) U+0443 (y)</p>	63
2	Latin - Greek	<p><b>pov</b> U+0070 (p) U+006F (o) U+0076 (v)  <b>pov</b> U+03C1 (ρ) U+03BF (ο) U+03BD (ν)</p>	47
3	Cyrillic - Greek	<p><b>kitty</b> U+043A (κ) U+0456 (i) U+0442 (τ) U+0442 (τ) U+0443 (y)  <b>kitty</b> U+03BA (κ) U+03AF (ι) U+03C4 (τ) U+03C4 (τ) U+03B3 (γ)</p>	25
4	Devanagari - Gurmukhi	<p><b>भँम</b> U+092D (भ) U+0945 (ँ) U+092E (म)  <b>ਮੱਸ</b> U+0A2E (ਮ) U+0A71 (ੌ) U+0A38 (ਸ)</p>	54
5	Kannada - Telugu	<p><b>ఓఱు</b> U+0C13 (ఓ) U+0C1F (ఱ) U+0C41 (ఱ)  <b>ఱు</b> U+0C13 (ఱ) U+0C1F (ఱ) U+0C41 (ఱ)</p>	68
6	Hanja - Hangul	<p><b>ㄴㅁ</b> U+B258 (ㄴ) U+B9C8 (ㅁ)  <b>ㄴㅁ</b> U+723F (ㄴ) U+535F (ㅁ)</p>	16

# Examples of Variant Code Points Identified by Script User Communities

#	Script Pairing	Code Point with Potential Security Issue	# of overall code points available for registrations
7	Katakana - Hiragana (same script)	<p>カフエ U+30AB (カ) U+30D5 (フ) U+30A7 (エ)</p> <p>カフエ U+529B (カ) U+30D5 (フ) U+30A7 (エ)</p>	20
8	Arabic - Urdu (same script)	<p>مارکیٹ U+0645 (م) U+0627 (ا) U+0631 (ر) U+06A9 (ک) U+06CC (ی) U+0679 (ٹ)</p> <p>مارکیٹ U+0645 (م) U+0627 (ا) U+0631 (ر) U+06A9 (ک) U+064A (ی) U+0679 (ٹ)</p> <p>مارکیٹ U+0645 (م) U+0627 (ا) U+0631 (ر) U+0643 (ک) U+06CC (ی) U+0679 (ٹ)</p> <p>مارکیٹ U+0645 (م) U+0627 (ا) U+0631 (ر) U+0643 (ک) U+064A (ی) U+0679 (ٹ)</p> <p>مارکیٹ U+0645 (م) U+0627 (ا) U+0631 (ر) U+06AA (ک) U+06CC (ی) U+0679 (ٹ)</p> <p>مارکیٹ U+0645 (م) U+0627 (ا) U+0631 (ر) U+06AA (ک) U+064A (ی) U+0679 (ٹ)</p>	54

# Variant Examples Defined by Communities: Latin & Cyrillic

#	Latin	Cyrilic
1	a 0061	а 0430
2	c 0063	с 0441
3	e 0065	е 0435
4	h 0068	h 04BB
5	i 0069	и 0456
6	j 006A	ј 0458
7	l 0063	л 04CF

#	Latin	Cyrilic
8	o 006F	о 043F
9	p 0070	р 0440
10	r 0072	р 0433
11	s 0073	с 0455
12	x 0078	х 0445
13	y 0079	у 0443
14	ä 00E4	ä 04D3

#	Latin	Cyrilic
15	æ 00E6	æ 04D5
16	ç 00E7	ç 04AB
17	ë 00EB	ë 0451
18	ö 00F6	ö 0E47
19	ÿ 00FF	ÿ 04F1
20	ǎ 0103	ǎ 04D1
21	ħ 0127	ħ 045B

#	Latin	Cyrilic
22	ř 0155	ř 0453
23	ə 01DD	ə 04D9
24	ƒ 024D	ƒ 0493
25	3 0292	3 04E1

# Variant Examples Defined by Communities: Devanagari & Gurmukhi

#	Devanagari	Gurmukhi
1	उ 0909	उ 0A24
2	ऐ 090E	ऐ 0910
3	ट 091F	ਟ 0A1F
4	ठ 0920	ਠ 0A20
5	ढ 0922	ਢ 0A2B

#	Devanagari	Gurmukhi
6	प 092A	ਧ 0A27
7	भ 092D	ਮ 0A2E
8	म 092E	ਸ 0A38
9	ि 093F	ਿ 0A3F
10	ी 0940	ੀ 0A40

#	Devanagari	Gurmukhi
11	ँ 0945	ੱ 0A71
12	□ 0956	ੰ 0A41
13	□ 0957	ੰ 0A42

# Variant Examples Defined by Communities: Telugu & Kannada

#	Telugu	Kannada
1	ం 0C02	ಂ 0C82
2	ః 0C03	ః 0C83
3	అ 0C05	ಅ 0C85
4	ಆ 0C06	ಆ 0C86
5	ಇ 0C07	ಇ 0C87
6	ಒ 0C12	ಒ 0C92

#	Telugu	Kannada
7	ಓ 0C13	ಓ 0C93
8	ಜ 0C1C	ಜ 0C9C
9	ಝ 0C1D	ಝ 0C6D
10	ಠ 0C20	ಠ 0CA0
11	ಞ 0C23	ಞ 0CA3
12	ಬ 0C2C	ಬ 0CAC

#	Telugu	Kannada
13	ಭ 0C2D	ಭ 0CAD
14	ಯ 0C2F	ಯ 0CAF
15	ಳ 0C33	ಳ 0CB3
16	ಿ 0C3F	ಿ 0CBF
17	ಱ 0C41	ಱ 0CC1

# Variant Examples Defined by Communities: Japanese

#	Katakana	Han
1	ー 30FC	ー 4E00
2	ゝ 30FD	ゝ 4E36
3	ヱ 30A8	ヱ 5DE5
4	カ 30AB	カ 529B
5	タ 30BF	タ 5915

#	Katakana	Han
6	ト 30C8	ト 535C
7	ハ 30CF	ハ 516B
8	ニ 30C8	ニ 4E8C
9	口 30ED	口 53E3

#	Hiragana	Katakana
1	へ 3078	へ 30D8
2	へ 3079	へ 30D9
3	へ 307A	へ 30DA



# Variant Examples Defined by Communities: Arabic

Set #	Variant Set Members							
1	آ 0622	أ 0623	إ 0625	ا 0627	أ 0672			
2	ؤ 0624	و 0648						
3	ئ 0626	ى 0649	ي 064A	ب 067B	ى 06CC	ى 06CD	ي 06D0	ے 06D2
4	ة 0629	ه 0647	ه 06BE	ة 06C0	ه 06C1	ة 06C2	ة 06C3	ه 06D5
5	ت 062A	ن 067A						
6	ث 062B	ت 067D						
7	ف 0641	ق 0642	ب 06A2	ف 067A				
8	ك 0643	ك 06A9	ك 06AA					

Set #	Variant Set Members			
9	ن 0646	ن 06BA		
10	ٹ 0679	ٹ 06BB		
11	پ 067E	ن 06BD	ي 06D1	
12	چ 0683	چ 0684		
13	ڈ 068E	ڈ 068F		
14	ٹا 06A4	ق 06AB		
15	ک 06AB	ک 06AD	گ 06AF	ک 0763
16	پ 0767	□ 089A		

# Scope of IDN Table Harmonization

- All IDN tables under a given gTLD
  - Suggested in IDN Implementation Guideline V4.0 Guideline 13
- All IDN Tables be harmonized across all variant gTLDs of a given gTLD
  - Based on Preliminary Recommendation 1

# Phase 2 Preliminary Recommendation 5

**Preliminary Recommendation 5**: A registrant and its sponsoring registrar must jointly determine the source domain name for calculating the variant domain set under a given gTLD. The registrants and sponsoring registrars of the grandfathered variant domain names pursuant to Preliminary Recommendation 3 are exempt from this requirement.

**Rationale:** “...The EPDP Team also had extensive discussion around whether the source domain name can be changed or deleted. One member proposed that it should be possible to delete or change a source domain name as long as its activated variant domain name(s) remain allocatable. The ultimate agreement among the team was to not to prescribe any policy recommendation pertaining to this matter. The EPDP Team understood that the specific details in the domain name lifecycle management are discretionary on part of registry operators and registrars, in accordance with their policies and practices. In addition, registry operators would not allow a situation where an activated variant domain name becomes “blocked” due to the change or deletion of the source domain name, as this would likely become a non-compliance issue with the IDN Table implementation.”

# Discuss Draft Glossary & Terminology Usage